WHAT IS CLAIMED IS:

37. A therapeutic method for treating renal failure, said method comprising administering to a subject susceptible to such disorder a therapeutically-effective amount of an active compound of Formula I:

wherein A is selected from methylene, CO, SO and SO2; wherein X is selected from oxygen atom, methylene and $\sim NR_{10}$ with R_{10} selected from hydrido, alkyl and benzyl; wherein each of R1 and R9 is a group independently selected from hydrido, alkyl, cycloalkyl, alkoxyacyl, haloalkyl, alkoxycarbonyl, benzyloxycarbonyl, loweralkanoyl, haloalkylacyl, phenyl, benzyl, naphthyl, and naphthylmethyl, any one of which groups having a substitutable position may be optionally substituted with one or more radicals selected from alkyl, alkoxy, alkenyl, alkynyl, halo, haloalkyl, cyano and phenyl, and wherein the nitrogen atom to which R1 and R9 are attached may be combined with oxygen to form an N-oxide; wherein R2 is selected from hydrido, alkyl, dialkylaminoalkyl, alkylacylaminoalkyl, benzyl and cycloalkyl; wherein R3 is selected from alkyl, cycloalkylalkyl, acylaminoalkyl, phenylalkyl, naphthylmethyl, aryl, heterocyclicalkyl and heterocycliccycloalkyl, wherein the cyclic portion of any of said phenylalkyl, naphthylmethyl, aryl, heterocyclicalkyl and heterocycliccycloalkyl groups may be substituted by one or more radicals selected from halo, hydroxy, alkoxy and alkyl; wherein each of R4 and R6 is independently selected from hydrido, alkyl, benzyl and cycloalkyl; wherein each of R5 and R8 is independently selected from

$$-(CH_2)_{q} \begin{bmatrix} R_{13} \\ C \\ R_{14} \end{bmatrix}_{p} C \equiv C-V$$

wherein V is selected from hydrido, alkyl, cycloalkyl, haloalkyl, benzyl and phenyl; wherein each of R13 and R14 is a radical independently selected from hydrido, alkyl, alkenyl, alkynyl, cycloalkyl, phenyl, heterocyclic, heterocyclicalkyl and heterocycliccycloalkyl; wherein R7 is selected from substituted or unsubstituted alkyl, cycloalkyl, phenyl, cycloalkylalkyl and phenylalkyl, any one of which may be substituted with one or more groups selected from alkyl, hydroxy, alkoxy, halo, haloalkyl, alkenyl, alkynyl and cyano; wherein each of R11 and R12 is independently selected from hydrido, alkyl, haloalkyl, dialkylamino and phenyl; and wherein m is zero or one; wherein n is a number selected from zero through five; wherein q is a number selected from zero through five; and wherein q is a number selected from zero through five; or a pharmaceutically-acceptable salt thereof.

methylene, CO, SO and SO2; wherein X is selected from oxygen atom, methylene and NR_{10} with R_{10} selected from hydrido, alkyl and benzyl; wherein each of R_1 and R_9 is independently selected from hydrido, lower alkyl, haloalkyl, cycloalkyl, alkoxycarbonyl, benzyloxycarbonyl, loweralkanoyl, alkoxyacyl, phenyl and benzyl, and wherein the nitrogen atom to which R_1 and R_9 are attached may be combined with oxygen to form an N-oxide; wherein each of R_2 , R_4 and R_6 is independently selected from hydrido and alkyl; wherein R_3 is selected from phenylalkyl, naphthylmethyl, cyclohexylalkyl, cyclopentylalkyl, heteroarylalkyl and heteroarylcycloalkyl; wherein each of R_5 and R_8 is independently selected from

$$-\left(CH_{2}\right)_{q} \begin{bmatrix} R_{13} \\ C \\ R_{14} \end{bmatrix}_{p} C \equiv C-V$$

wherein V is selected from hydrido, alkyl, haloalkyl, benzyl and phenyl; wherein each of R13 and R14 is a radical independently selected from hydrido, alkyl, alkenyl, alkynyl, cycloalkyl, heteroaryl, heteroarylalkyl and heteroarylcycloalkyl; wherein R7 is selected from substituted or unsubstituted cyclohexylmethyl and benzyl, either one of which may be substituted with one or more groups selected from alkyl, hydroxy, alkoxy, halo and haloalkyl; wherein each of R11 and R12 is independently selected from hydrido, alkyl, dialkylamino and phenyl; wherein m is zero or one; wherein n is a number selected from zero through five; wherein p is a number selected from zero through five; and wherein q is a number selected from zero through five; or a pharmaceutically-acceptable salt thereof.

methylene, CO, SO and SO2; wherein X is selected from oxygen atom, methylene and NR_{10} with R_{10} selected from hyrido, alkyl and benzyl; wherein each of R_1 and R_9 is independently selected from hydrido, alkyl, alkoxyacyl, haloalkyl, alkoxycarbonyl, benzyloxycarbonyl and benzyl, and wherein the nitrogen atom to which R_1 and R_9 are attached may be combined with oxygen to form an N-oxide; wherein each of R_2 , R_4 and R_6 is independently selected from hydrido and alkyl; wherein R_3 is selected from benzyl, phenethyl, cyclohexylmethyl, phenpropyl, pyrrolidinyl, piperidinyl, pyrrolidinylmethyl, piperidinylmethyl, pyrazolemethyl, pyrazoleethyl, pyridylmethyl, pyridylethyl, thiazolemethyl, thiazoleethyl, imidazolemethyl, furanylmethyl, furanylethyl,

oxazolemethyl, oxazoleethyl, isoxazolemethyl, isoxazoleethyl, pyridazinemethyl, pyridazinemethyl, pyridazinemethyl, pyrazinemethyl and pyrazineethyl; wherein each of R_5 and R_8 is independently selected from

$$\begin{array}{c|c}
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 & C \\
 & C \\
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 & C \\
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wherein V is selected from hydrido, alkyl and haloalkyl; wherein each of R_{13} and R_{14} is a radical independently selected from hydrido, alkyl, alkenyl, alkynyl, thiazole and thiazolemethyl; wherein R_{7} is cyclohexylmethyl; wherein each of R_{11} and R_{12} is independently selected from hydrido, alkyl, dialkylamino and phenyl; wherein m is zero or one; wherein n is a number selected from zero through five; wherein p is a number selected from zero through five; and wherein q is a number selected from zero through five; or a pharmaceutically-acceptable salt thereof.

40. The method of Claim 39 wherein A is selected from CO and SO2; wherein X is selected from oxygen atom, methylene and NR₁₀ with R₁₀ selected from hydrido and methyl; wherein each of R₁ and R₉ is independently selected from hydrido, lower alkyl, alkoxyacyl, alkoxycarbonyl, benzyloxycarbonyl, haloalkyl and benzyl, and wherein the nitrogen atom to which R₁ and R₉ are attached may be combined with oxygen to form an N-oxide; wherein R₂ is selected from hydrido, methyl, ethyl and isopropyl; wherein R₃ is selected from benzyl, phenethyl, cyclohexylmethyl, pyrrolidinyl, piperidinyl, pyrrolidinylmethyl, piperidinylmethyl, thiazolemethyl, pyrazoleethyl, pyridylmethyl, pyridylethyl, thiazolemethyl, thiazoleethyl, imidazolemethyl, imidazoleethyl, thienylmethyl, thienylethyl, furanylmethyl, furanylethyl, oxazolemethyl, isoxazolemethyl, isoxazoleethyl, isoxazoleethyl,

pyridazinemethyl, pyridazineethyl, pyrazinemethyl and pyrazineethyl; wherein each of R4 and R6 is independently selected from hydrido and methyl; wherein each of R5 and R8 is independently selected from

wherein V is selected from hydrido, alkyl and trifluoromethyl; wherein each of R13 and R14 is a radical independently selected from hydrido, alkyl and alkynyl; wherein R7 is cyclohexylmethyl; wherein each of R11 and R12 is independently selected from hydrido, alkyl, dialkylamino and phenyl; wherein m is zero; wherein n is a number selected from zero through five; wherein p is a number selected from zero through five; and wherein q is a number selected from zero through five; or a pharmaceutically-acceptable salt thereof.

41. The method of Claim 40 wherein A is selected from CO and SO2; wherein X is selected from oxygen atom and methylene; wherein each of R1 and R9 is independently selected from hydrido, methyl, ethyl, n-propyl, isopropyl, benzyl, b, b, b-trifluoroethyl, t-butyloxycarbonyl and methoxymethylcarbonyl, and wherein the nitrogen atom to which R1 and R9 are attached may be combined with oxygen to form an N-oxide; wherein R2 is selected from hydrido, methyl, ethyl and isopropyl; wherein R3 is selected from benzyl, cyclohexylmethyl, phenethyl, pyrazolemethyl, pyrazoleethyl, pyridylmethyl, pyridylethyl, thiazolemethyl, thiazoleethyl, imidazolemethyl, imidazoleethyl, thienylmethyl, thienylethyl, furanylmethyl, furanylethyl, oxazolemethyl, oxazolemethyl, isoxazolemethyl, pyridazinemethyl,

pyridazineethyl, pyrazinemethyl and pyrazineethyl; wherein each of R5 and R8 is independently selected from

$$-\left(CH_{2}\right)_{q} \begin{bmatrix} R_{13} \\ C \\ R_{14} \end{bmatrix}_{p} C \equiv C-V$$

wherein V is selected from hydrido, alkyl and trifluoromethyl; wherein each of R₁₃ and R₁₄ is a radical independently selected from hydrido, methyl, ethyl, propyl and ethynyl; wherein R₇ is cyclohexylmethyl; wherein each of R₄ and R₆ is independently selected from hydrido and methyl; wherein each of R₁₁ and R₁₂ is independently selected from hydrido, alkyl, dialkylamino and phenyl; wherein m is zero; wherein n is a number selected from zero through five; wherein p is a number selected from zero through five; and wherein q is a number selected from zero through five; or a pharmaceutically-acceptable salt thereof.

42. The method of Claim 41 wherein A is selected from CO and SO2; wherein X is selected from oxygen atom and methylene; wherein each of R₁ and R₉ is a group independently selected from hydrido, methyl, ethyl, n-propyl, isopropyl, benzyl, b, b, b-trifluoroethyl, t-butyloxycarbonyl and methoxymethylcarbonyl, and wherein the nitrogen atom to which R₁ and R₉ are attached may be combined with oxygen to form an N-oxide; wherein R₂ is selected from hydrido, methyl, ethyl and isopropyl; wherein R₃ is selected from benzyl, cyclohexylmethyl, phenethyl, imidazolemethyl, pyridylmethyl and 2-pyridylethyl; wherein each of R₅ and R₈ is independently selected from

$$-\left(CH_{2}\right)_{q} \begin{bmatrix} R_{13} \\ C \\ R_{14} \end{bmatrix}_{p} C \equiv C-V$$

wherein V is selected from hydrido, alkyl and trifluoromethyl; wherein each of R₁₃ and R₁₄ is a radical independently selected from hydrido, methyl and ethynyl; wherein R₇ is cyclohexylmethyl; wherein each of R₄ and R₆ is independently selected from hydrido and methyl; wherein each of R₁₁ and R₁₂ is independently selected from hydrido, alkyl and phenyl; wherein m is zero; wherein n is a number selected from zero through three; wherein p is a number selected from one through three; and wherein q is zero or one; or a pharmaceutically-acceptable salt thereof.

43. The method of Claim 42 wherein said compound is selected from compounds, their tautomers, and the pharmaceutically-acceptable esters and salts thereof, of the group consisting of

- 44. The method of Claim 42 wherein said compound is N1-[1R*-[[[1S,1R*-(cyclohexylmethyl)-2S*,3R*-dihydroxy-hexynyl]amino]carbonyl]-3-butynyl]-N4-[2-(dimethylamino)ethyl]-N4-methyl-2S*-(phenylmethyl)butanediamide or a pharmaceutically-acceptable salt thereof.
- **45.** The method of Claim 42 wherein said compound is [1R*-[[[1R*-[[[1S,1R*-(cyclohexylmethyl)-2S*,3R*-dihydroxy-hexynyl]amino]carbonyl]-3-butynyl]amino]carbonyl]-2-phenylethyl)[2-(dimethylamino)ethyl]methylcarbamate or a pharmaceutically-acceptable salt thereof.
 - 46. The method of Claim 42 wherein said compound is

or a pharmaceutically-acceptable salt thereof.

47. The method of Claim 42 wherein said compound is

or a pharmaceutically-acceptable salt thereof.

USE OF PROPARGYL GLYCINE AMINO PROPARGYL DIOL COMPOUNDS FOR TREATMENT OF RENAL FAILURE

ABSTRACT

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Compounds characterized generally as propargyl glycine amino propargyl diol derivatives are useful for treatment of renal failure. Compounds of particular interest are those of Formula I

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wherein A is selected from CO and SO2 wherein X is selected from oxygen atom and methylene; wherein each of R₁ and R₉ is a group independently selected from hydrido, methyl, ethyl, n-propyl, isopropyl, benzyl, b, b, b-trifluoroethyl, t-butyloxycarbonyl and methoxymethylcarbonyl, and wherein the nitrogen atom to which R₁ and R₉ are attached may be combined with oxygen to form an N-oxide; wherein R2 is selected from hydrido, methyl, ethyl and isopropyl; wherein R3 is selected from benzyl, cyclohexylmethyl, phenethyl, imidazolemethyl, pyridylmethyl and 2-pyridylethyl; wherein each of R5 and R8 is independently propargyl or a propargyl-containing moiety; wherein R7 is cyclohexylmethyl; wherein each of R4 and R6 is independently selected from hydrido and methyl; wherein each of R11 and R12 is independently selected from hydrido, alkyl and phenyl; wherein m is zero; and wherein n is a number selected from zero through three; or a pharmaceutically-acceptable salt thereof.

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